

What is claimed is:

1. A bed water sampling device for simultaneously collecting a plurality of water samples from the lowest water column at different levels above a water
5 bed with a plurality of cylindrical sample containers provided at at least one end with a closure device actuated by a time-controlled release and arranged for vertical adjustment in a horizontal orientation on a center support rod terminating at one end in a ground element and connected at its opposite end to a steel cable for positioning on a water bed
10 characterized by the fact that the center support rod (2) is connected at low friction and for free rotatability between a weighted base frame (7) as the ground element and the steel cable (9) at low friction and with a flow vane (6), that the time-controlled release (10) is mounted in the weighted base frame (7) in a compression proof
15 manner and is activated automatically only by the placement continuing for a predetermined time on the water bed and that the sample containers (3) are provided at their other end (15) with a closure device (16) also actuated by the time-controlled release (10).
- 20 2. The bed water sampling device of claim 1, characterized by the fact that the two closure devices (16) of each sampling container (3) are provided with closure valves (17) which in the open state are connected against the bias of a rubber tension device (18) by a release shaft (21) latched by a corrosion
25 wire (22), the corrosion wire being charged with electrical voltage leading to its rupture by activating the time controlled release (10).
3. (Amended) The bed water sampling device of claim 1, characterized by the fact that
30 each sampling container (3) is provided with a water discharge valve (23) and, positioned diametrically opposite, an air inlet valve (24).

4. (Amended) The bed water sampling device of claim 1,
characterized by the fact that
the sampling container (3) is transparent.
- 5 5. (Amended) The bed water sampling device of claim 1,
characterized by the fact that
the sampling containers (3) and both closure devices (16) are constructed to
be compression proof.
- 10 6. (Amended) The bed water sampling device of claim 1,
characterized by the fact that
a total of six sampling containers (3) are arranged at a height of 2 m and that
each sampling container (3) has a filling capacity of 5 to 6 l.
- 15 7. (Amended) The bed water sampling device of claim 1,
characterized by the fact that
above the sampling device (1) one or more buoyancy units are attached to a
steel cable (9).
- 20 8. (New) A bed water sampling device for simultaneously collecting
a plurality of water samples from different levels of the lowest water column
above a water bed, comprising:
a plurality of tubular sampling containers forming openings at opposite
ends thereof;
- 25 means for simultaneously changing the openings from an open to a
closed state in response to a predetermined signal;
rotatable means for mounting the sampling containers in a horizontal
orientation in a vertical arrangement;
- means connected to the mounting means for aligning the openings of
30 the sampling containers in the direction of water current;
- means rotatably connected to the mounting means for placement on
the water bed;

means connected to the mounting means opposite the rotatably
connected means for raising and lowering the sampling device relative to the
water bed; and

means responsive to placing the sampling device on the water bed for
5 generating the predetermined signal.

9. (New) The sampling device of claim 8, wherein the means for
simultaneously changing the openings from an open to a closed state
comprises valve covers provided with means for biasing the valve covers to
10 their closing position.

10. (New) The sampling device of claim 9, wherein the biasing means
comprises an elongate elastic member connected to the valve covers and
extending through the tubular member.

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11. (New) The sampling device of claim 9, wherein the openings are
maintained in their open state a latch releasable in response to the
predetermined signal.

20 12. (New) The sampling device of claim 11, wherein the latch is secured
by a wire and the predetermined signal comprises an electric current for
rupturing the wire.

13. (New) The sampling device of claim 8, wherein the signal generating
25 means comprises means responsive to the placing of the rotatably connected
means on the water bed.

14. (New) The sampling device of claim 13, wherein the signal generating
means further comprises means for delaying generation of the predetermined
30 signal for a predetermined interval of time after placement of the rotatably
connected means on the water bed.

15. (New) The sampling device of claim 8, wherein the rotatably connected member comprises a weighted frame member.

16. (New) The sampling device of claim 15, wherein the weighted frame
5 member is provided with an elongate shaft for rotatably receiving mounting means.

17. (New) The sampling device of claim 16, wherein the means for
lowering and raising the sampling device comprises a shackle with a cable
10 connected thereto.

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